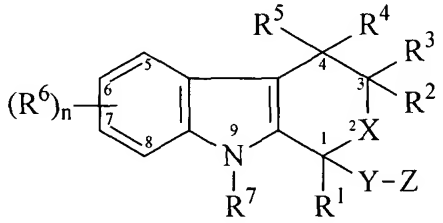
Abstract

The present invention provides a therapeutic method to treat non-malignant diseases characterized by the excessive tissue growth, *e.g.*, hyperplastic diseases, comprising administering to a mammal (*e.g.*, human) afflicted with excessive tissue growth, an effective amount of a derivative of an indole compound of formula (I):formula (I):



I

wherein R^1 is lower alkyl, (hydroxy)lower alkyl, lower alkenyl, lower alkynyl, lower cycloalkyl, phenyl, benzyl or 2-thienyl; R^2, R^3, R^4 and R^5 are the same or different and are each hydrogen or lower alkyl; each R^6 is individually hydrogen, lower alkyl, hydroxy, (hydroxy)lower alkyl, lower alkoxy, benzyloxy, lower alkanoyloxy, nitro or halo, R^7 is hydrogen, lower alkyl or lower alkenyl, X is oxy and thio, Y is carbonyl, $-(CH_2)_{1\text{-}3}-$, $-(C_1\text{-}C_3)$alkyl(CO)-, or $-(CH_2)_{1\text{-}3}SO_2-$; Z is hydroxy, lower alkoxy, $(C_2\text{-}C_4)$acyloxy, $-N(R^8)(R^9)$, phenylamino, (ω-(4-pyridyl)$(C_2\text{-}C_4$ alkoxy), (ω-($(R^8)(R^9)$ amino)$(C_2\text{-}C_4$ alkoxy), an amino acid ester of (ω-(HO)$(C_2\text{-}C_4)$)alkoxy, $-N(R^8)CH(R^8)CO_2H$, 1′-D-glucuronyloxy, $-SO_3H$, $-PO_4H_2$, -N(NO)(OH), $-SO_2NH_2$, -PO(OH)(NH_2), $-OCH_2CH_2N(CH_3)_3^+$, or tetrazolyl; wherein R^8 and R^9 are each H, $(C_1\text{-}C_3)$alkyl or together with N are a 5- or 6-membered heterocyclic ring comprising 1-3 $N(R^8)$, S or nonperoxide O; n is 0, 1, 2, or 3; wherein R^8 and R^9 are each H, $(C_1\text{-}C_3)$alkyl or together with N are a 5- or 6-membered heterocyclic ring comprising 1-3 $N(R^8)$, S or nonperoxide O; each alkyl or phenyl group of R^1, R^2, R^3, R^4,R^5, R^6, R^7 and Z is optionally substituted with 1, 2, or 3 $(C_1\text{-}C_4)$alkyl groups; or a pharmaceutically acceptable salt thereof.